

CLAIMS

We claim:

1. A method comprising the steps of:

- (a) storing data corresponding to a sequence in a data store in
operative connection with a computer, wherein the sequence
includes data representative of at least one triggering event and at
least one action to be carried out responsive to the triggering event;
- (b) sensing for the triggering event through operation of the computer;
- (c) carrying out the at least one action in the sequence responsive to
the triggering event through operation of the computer, wherein the
at least one action includes capturing at least one image from a
camera; and
- (d) storing in the data store responsive to operation of the computer,
data representative to the triggering event and data corresponding
to the at least one image.

2. The method according to claim 1 and prior to step (b) further comprising the steps of periodically capturing images from the camera; and storing in the data store in correlated relation with the data representative of the triggering event, data corresponding to at least one image captured immediately prior to occurrence of the triggering event.

3. The method according to claim 1 wherein in step (a) the triggering event in the sequence includes sensing an image condition corresponding to lack of usable video from a first camera, and an action in the sequence includes capturing an image from a second camera, wherein in step (d) data corresponding to an image from the second camera is stored in the data store.

4. The method according to claim 3 wherein sensing lack of usable video includes sensing lack of contrast in an image captured from the first camera.

5. The method according to claim 3 wherein sensing lack of usable video includes sensing intensity of a plurality of pixels included in the image and determining that a quantity of the pixels are either above or below high and low thresholds, respectively.

6. The method according to claim 1 wherein in step (a) the triggering event includes sensing motion by detecting differences between a plurality of images captured from a first camera.

7. The method according to claim 6 and prior to step (b) further comprising the step of selecting a detection area within a field of view of the first camera, the detection area being less than the field of view, and wherein in step (a) the triggering event in the sequence includes sensing motion in the detection area.

8. The method according to claim 6 and prior to step (b) further comprising the step of:

(e) storing in operative connection with the processor, degree data wherein the degree data corresponds to a degree of change in a plurality of pixels in the detection area, which degree of change corresponds to motion, and wherein step (b) includes sensing for the degree of change in the plurality of pixels in the detection area between a plurality of captured images.

9. The method according to claim 8 wherein in step (e) the degree data corresponds to both a change in property of the pixels in the detection area and a quantity of the pixels which undergo such change in property.

10. The method according to claim 1 wherein at least one action in the sequence includes data representative of sending at least one e-mail to an e-mail address, wherein in step (c) the computer is operative to cause the e-mail to be sent.

5 11. The method according to claim 10 wherein the e-mail sent in step (c) includes therewith at least one image captured by the camera.

12. The method according to claim 10 and further comprising prior to step (b) storing a group comprising a plurality of e-mail addresses in the data store, to be notified in the event of the occurrence of a triggering event, and wherein in step
10 (a) an action in the sequence includes sending an e-mail message to the group, and wherein in step (c) the computer is operative to cause an e-mail message to be sent to the group.

13. The method according to claim 1 and further comprising prior to step (b) the steps of:

15 storing in the data store data corresponding to at least one recognizable image;

and wherein in step (a) the triggering event includes the presence of the at least one recognizable image in an image captured by the camera.

14. The method according to claim 13 wherein the recognizable image includes at least one human face.

5 15. The method according to claim 13 wherein the recognizable image includes at least one weapon.

16. The method according to claim 13 wherein the recognizable image includes at least one type of clothing.

10 17. The method according to claim 1 and prior to step (a) further comprising the step of:

assigning descriptive designators to each of a plurality of cameras, and wherein the sequence data stored in step (a) is input using the descriptive designators.

15 18. The method according to claim 17 wherein in step (d) the data representative of the triggering event includes a descriptive designator corresponding to a camera capturing the image.

19. The method according to claim 1 wherein the computer is operatively connected to an automated banking machine and wherein in step (a) at least one triggering event in a sequence corresponds to conduct at least one transaction step at the automated banking machine, and wherein an action in the sequence includes capturing an image of a user of the banking machine, and wherein in step (d) an image of the user is stored in the data store.

20. The method according to claim 19 and further comprising the steps of:

conducting a transaction at the automated banking machine, wherein the conduct of the transaction is operative to cause the generation of transaction data corresponding to the transaction;

and wherein in step (d) data representative of the transaction data is stored in the data store.

21. The method according to claim 20 wherein the transaction data stored in (d) includes data representative of at least one time associated with the transaction.

22. The method according to claim 20 wherein the transaction data stored in (d) includes data representative of a user name associated with the user conducting the transaction.

23. The method according to claim 20 wherein the transaction data stored in step (d) includes data representative of an account number associated with the transaction.

24. The method according to claim 20 wherein the transaction data stored in (d) includes data representative of a transaction type associated with the transaction.

25. The method according to claim 20 wherein the transaction data stored in step (d) includes data representative of an amount associated with the transaction.

26. The method according to claim 21 and further comprising the steps of searching the data stored in the data store by transaction time, and recovering from the data store at least one stored image based on the transaction time associated with the transaction.

27. The method according to claim 26 wherein the transaction time includes a time period, wherein in the recovery step images are recovered responsive to a time associated with a transaction being within the time period.

28. The method according to claim 24 and further comprising the steps of
5 searching the data stored in the data store by transaction type, and recovering from the data store at least one stored image based on transaction type associated with the transaction.

29. The method according to claim 20 wherein the transaction data includes at least one transaction parameter, wherein the transaction parameter includes at
10 least one of a time, a user name, an account number, an amount and a transaction type.

30. The method according to claim 29 and further comprising the steps of
searching the data stored in the data store by at least one transaction parameter associated with transactions, and recovering from the data store at least one stored
15 image corresponding to the at least one parameter.

31. The method according to claim 29 wherein the transaction data includes at least two parameters, and further comprising the steps of searching the transaction data stored in the data store for the at least two parameters, and recovering from

the data store at least one image corresponding to a transaction having the at least two parameters associated therewith.

32. The method according to claim 29 wherein the transaction data includes at least two transaction parameters, and further comprising the steps of:

5 including an image deletion routine in operative connection with the computer operative to delete images corresponding to a first transaction parameter from the data store while retaining images corresponding to a second transaction parameter;

10 deleting data from the data store corresponding to images responsive to operation of the image deletion routine in the computer, wherein the deleted images correspond to the first transaction parameter.

33. The method according to claim 32 and further comprising the step of sensing for available storage in the data store, and wherein in the deleting step the deletion of data is initiated responsive to available storage reaching a first level.

15 34. The method according to claim 32 wherein in the deleting step the deletion of data is stopped responsive to available storage reaching a second level.

35. The method according to claim 1 wherein at least one of the actions in the sequence stored in step (a) includes capturing images on a generally continuous basis from at least one camera, and wherein in step (d) the generally continuous video images are stored in the data store.

5 36. The method according to claim 35 wherein the generally continuous video images stored in step (d) are captured at a rate of at least ten frames per second.

37. The method according to claim 1 and further comprising the step of:

selectively deleting from the data store data corresponding to images by a type of triggering event causing the image to be stored, wherein data
10 corresponding to images associated with at least one type of triggering event is deleted from the data store and wherein data corresponding to images associated with at least one other type of triggering event is retained.

38. The method according to claim 37 wherein a first type of triggering event
15 is associated with an alarm condition, and a second type of triggering event is associated with other than an alarm condition, wherein in the deleting step data corresponding to images associated with the second type of triggering event are deleted.

39. The method according to claim 37 and further comprising the step of storing in connection with the computer an image deletion routine, and wherein the computer operates to delete data corresponding to images associated with the at least one type of triggering event responsive to storage in the data store reaching a first level.

40. The method according to claim 39 wherein the computer is operative to discontinue the deletion of image data responsive to the storage in the data store reaching a second level.

41. The method according to claim 37 and further comprising storing an image deletion routine in operative connection with the computer, wherein the image deletion routine is operative to cause the computer to execute the deleting step wherein data corresponding to images is deleted in response to a type of triggering event causing the image to be stored and an age of the stored data corresponding to the image.

42. The method according to claim 1 wherein the triggering event corresponds to a time.

43. The method according to claim 1 and further comprising the steps of:

storing in operative connection with the computer, data representative of at least one visual characteristic in the image;

searching the data corresponding to images in the data store for the visual characteristic;

5 identifying those images including the visual characteristic.

44. The method according to claim 43 wherein the visual characteristic includes at least one physical characteristic.

45. The method according to claim 43 wherein the visual characteristic includes at least one facial characteristic.

10 46. The method according to claim 45 wherein the facial characteristic corresponds to a face of a particular person.

47. The method according to claim 43 wherein the visual characteristic includes a particular article of apparel.

15 48. The method according to claim 43 wherein the visual characteristic includes a particular color.

49. The method according to claim 43 wherein the visual characteristic includes an image of a particular device.

50. The method according to claim 49 wherein the device includes a weapon.

51. The method according to claim 1 and further comprising the steps of;

5 storing in the data store, data corresponding to a plurality of images associated with a plurality of triggering events;

displaying at least one image corresponding to each triggering event on a display.

10 52. The method according to claim 51 wherein actions in at least one sequence include capturing and storing data corresponding to a plurality of images, and wherein in the displaying step a plurality of images corresponding to the triggering event are displayed as a set on the display.

15 53. The method according to claim 52 and further comprising the step of capturing and storing in a data store data corresponding to a prior image captured by at least one camera prior to occurrence of the triggering event, wherein the prior image is included in the displayed set.

54. The method according to claim 51 and further comprising the steps of:

providing on the display at least one icon, and navigating through a plurality of images responsive to selection of the icon with an input device.

5 55. The method according to claim 51 and prior to step (d) further comprising the step of storing a data compression parameter in operative connection with the triggering event, wherein the data corresponding to the image stored in step (d) is compressed in accordance with the data compression parameter.

56. The method according to claim 1 and further comprising the steps of:

10 providing a server in operative connection with the data store;

accessing stored data corresponding to the image of a user terminal in operative connection with the server.

57. The method according to claim 56 and further comprising the step of including through operation of the computer a digital signature with the accessed
15 stored data corresponding to the image.

58. The method according to claim 56 and further comprising the step of transferring data corresponding to the image to the user terminal.

59. The method according to claim 58 wherein the step of transferring the image to the user terminal includes transferring a key which enables reproducing the image at the user terminal.

60. The method according to claim 56 and further comprising the steps of;

requesting transfer of the data corresponding to image not including a digital signature with the user terminal;

including through operation of the computer an indicator in connection with the data corresponding to the image that the image may have been subject to modification; and

transferring the data corresponding to the image with the indicator to the user terminal.

61. The method according to claim 60 and further comprising the steps of:

providing an input through an input device at the user terminal that an image is to include a digital signature;

including through operation of the computer a digital signature in connection with the image;

5 transferring the data corresponding to the image to the user terminal with a key usable to verify the genuineness of the image.

62. The method according to claim 51 and further comprising the steps of:

selecting at least one image through an input to an input device, and
transferring the data corresponding to the selected image to a remote user
10 terminal.

63. The method according to claim 62 and wherein the input is operative to cause a visible marking indicating the selected image to be included on the display.

15 64. The method according to claim 62 wherein in the selecting step a plurality of images are selected, and further comprising transferring the data corresponding to the plurality of images as a batch to the remote user terminal.

65. The method according to claim 64 and further comprising including a digital signature in each of the plurality of transferred images responsive to operation of the computer.

5 66. The method according to claim 64 wherein in the transferring step the data corresponding to the images is transferred to a remote user terminal through a network.

67. The method according to claim 66 wherein the data corresponding to the images is transferred through the Internet.